

Appl. No. : 09/920,033
Filed : August 1, 2001

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently amended) A ~~non-cleaving~~ non-catalytic oligonucleotide compound ~~8 to 50~~ 12 to 30 nucleobases in length targeted to a nucleic acid molecule encoding apolipoprotein B, wherein said compound (1) specifically hybridizes to the nucleotide sequence set forth in SEQ ID NO: 3 excluding the start codon region; (2) comprises one or more modified sugar moieties and ~~(2) (3)~~ demonstrates at least ~~30%~~ 70% reduction ~~inhibition of apoB~~ apolipoprotein B mRNA levels ~~expression~~ when applied *in vitro* at a concentration of 150nM to HepG2 cells.

2-3 (Canceled)

4. (Currently amended) The non-catalytic oligonucleotide compound of claim 2 1 ~~wherein the antisense oligonucleotide comprises~~ comprising at least one modified internucleoside linkage.

5. (Currently amended) The non-catalytic oligonucleotide compound of claim 2 4 wherein the modified internucleoside linkage is a phosphorothioate linkage.

6-7 (Canceled)

8. (Currently amended) The non-catalytic oligonucleotide compound of claim 2 1 ~~wherein the antisense oligonucleotide comprises~~ comprising at least one modified nucleobase.

9. (Currently amended) The non-catalytic oligonucleotide compound of claim 8 wherein the modified nucleobase is a 5-methylcytosine.

10. (Currently amended) The non-catalytic oligonucleotide compound of claim 2 1 wherein the ~~antisense~~ non-catalytic oligonucleotide compound is a chimeric oligonucleotide.

11. (Currently amended) A ~~non-cleaving~~ non-catalytic oligonucleotide compound ~~8 to 50~~ 12 to 30 nucleobases in length wherein said compound (1) specifically hybridizes with at least an 8-nucleobase portion of an active site within the nucleotide sequence set forth in SEQ ID NO: 3 excluding the start codon region (2) comprises one or more modified sugar moieties and ~~(2) (3)~~

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demonstrates at least ~~50%~~ 70% inhibition of ~~apoB~~ apolipoprotein B mRNA levels expression when applied *in vitro* at a concentration of 150nM to HepG2 cells.

12. (Currently amended) A composition comprising the non-catalytic oligonucleotide compound of ~~any one of~~ claims 1, 2, ~~10 and~~ or 11 and a pharmaceutically acceptable carrier or diluent.

13. (Original) The composition of claim 12 further comprising a colloidal dispersion system.

14. (Canceled)

15. (Withdrawn) A method of inhibiting the expression of apolipoprotein B in cells or tissues comprising contacting said cells or tissues with the compound of claim 1 so that expression of apolipoprotein B is inhibited.

16. (Withdrawn) A method of treating an animal having a disease or condition associated with apolipoprotein B comprising administering to said animal a therapeutically or prophylactically effective amount of the compound of claim 1 so that expression of apolipoprotein B is inhibited.

17. (Withdrawn) The method of claim 16 wherein the condition involves abnormal lipid metabolism.

18. (Withdrawn) The method of claim 16 wherein the condition involves abnormal cholesterol metabolism.

19. (Withdrawn) The method of claim 16 wherein the condition is atherosclerosis.

20. (Currently amended) The ~~non-cleaving~~ non-catalytic oligonucleotide compound of claim 1 ~~targeted to a nucleic acid molecule encoding apolipoprotein B, wherein said compound specifically hybridizes to the nucleotide sequence set forth in SEQ ID NO: 3 and inhibits the expression of the long form of apolipoprotein B, ApoB-100.~~

21-27 (Canceled)

28. (Currently Amended) The non-catalytic oligonucleotide compound of claim 11 wherein the compound is a sodium salt.

29. (New) The non-catalytic oligonucleotide compound of claim 1, wherein the non-catalytic oligonucleotide compound targets a sequence within the range of nucleotides 1 to 103 or 157 to 14121 of SEQ ID NO: 3.

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30. (New) The non-catalytic oligonucleotide compound of claim 1, wherein the oligonucleotide compound targets a sequence within the range of nucleotides 1 to 79 or 182 to 14121 of SEQ ID NO: 3.

31. (New) The non-catalytic oligonucleotide compound of claim 11, wherein the non-catalytic oligonucleotide compound targets a sequence within the range of nucleotides 1 to 103 or 157 to 14121 of SEQ ID NO: 3.

32. (New) The non-catalytic oligonucleotide compound of claim 11, wherein the oligonucleotide compound targets a sequence within the range of nucleotides 1 to 79 or 182 to 14121 of SEQ ID NO: 3.

33. (New) The non-catalytic oligonucleotide compound of claim 1, wherein the modified sugar moiety is a 2' substituted sugar moiety or a bicyclic sugar moiety.

34. (New) The non-catalytic oligonucleotide compound of claim 33, wherein the 2' substituted sugar moiety is a 2'-O-methoxyethyl sugar moiety.

35. (New) The non-catalytic oligonucleotide compound of claim 33, wherein the bicyclic sugar moiety is a locked nucleic acid.

36. (New) The non-catalytic oligonucleotide compound of claim 1, wherein the oligonucleotide compound is an antisense oligonucleotide.

37. (New) The non-catalytic oligonucleotide compound of claim 11, wherein the modified sugar moiety is a 2' substituted sugar moiety or a bicyclic sugar moiety.

38. (New) The non-catalytic oligonucleotide compound of claim 37, wherein the 2' substituted sugar moiety is a 2'-O-methoxyethyl sugar moiety.

39. (New) The non-catalytic oligonucleotide compound of claim 38, wherein the bicyclic sugar moiety is a locked nucleic acid.